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CONGENITAL TUBERCULAR MESENTERIC DISEASE AND SUB-DIAPHRAGMATIC ABSCESS.

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THE comparative infrequency with which congenital diseases, other than syphilitic, are found, and the difficulty so often experienced in discovering in a subject so young the exact nature of any ailment from which it is suffering, and, in case of a fatal termination, in obtaining an autopsy to confirm the correctness or otherwise of any diagnosis made during life, make a case such as that about to be recorded of peculiar interest.

N. B., female, was seen by me when it was twenty-eight days old. The child had from its birth been extremely restless, never sleeping at any time for a longer period than half an hour. The mother had entirely fed the child for the first three weeks, but after that time cow's milk, diluted with water, had been substituted on account of an opinion having been formed by those nursing it that the maternal supply disagreed. That belief was founded on the fact that the child's motions were invariably hard, greenish, and curdy, and that flatulency was very troublesome. The belly had from birth been tumid, but this had been attributed to the presence of a large amount of flatus; for, whenever the child cried or appeared in pain, friction over the abdomen seemed to relieve it, and flatus escaped. Castor-oil, dill-water, and lime-water had occasionally been given to relieve symptoms, but still the condition of unrest persisted.

When first seen the most noticeable feature was the great distention of the belly; it was universally tympanitic, and the tension so great that it was impossible to map out with any accuracy the position of any of the internal organs, or to explore its cavity. The only points discoverable were the presence of a little more fulness and resistance to touch in the right hypochondriac region, and the manifestation of more pain there than elsewhere in palpation. There was no enlargement of the superficial veins, and no rise of temperature. The motions were unhealthy in character, and for about twelve hours had been somewhat watery, but there was no sediment of shreddy matter, or traces of blood-clot. There had been no sickness except on one occasion; the tongue was clean and moist, and food (diluted milk with lime water added) was taken readily.

In the course of a week the belly became enormously swollen, percussion eliciting a tympanitic sound; the superficial veins were prominently visible, and there appeared at the navel a faint blush of redness; there was no fluctuation. The motions were now much more healthy and not loose, and a sufficiency of bile was present in them; but some pain was usually manifested before the passage of either flatus or stool.

During the next fortnight the umbilicus became swollen, its redness increased, and some superficial fluctuation was detected immediately below it; the child exhibited no pain in palpation unless pressure was made on the right side in liver region. Food was taken with increasing difficulty, and pallor, accompanied by wasting, was apparent. At this time (the child being fifty-one days old), while an examination of the abdomen was being made, pus oozed out at the navel, and, on pressure, three ounces were evacuated, creamy and laudable in character, and subsequently during the day about one ounce more. After this discharge there was subsidence of the swelling below, but not above, the umbilicus, and the blueness of the superficial veins became less; but pain was still evidenced on pressure in the right hypochondrium, and slight but transient strabismus was observed. The child's condition underwent no amelioration; food was administered with much difficulty; pallor increased; very little sleep was obtained, and, after the lapse of three days from the bursting of the abscess, death ensued, a convulsion having occurred an hour previously. The child at death was fifty-four days old.

On making a post-mortem examination there was found on the right side beneath the peritoneum a large sub-diaphragmatic abscess, containing nearly three ounces of pus, which had burrowed down thence to the umbilicus, between the peritoneum and the deep surface of the abdominal muscles. The parietal layer of the peritoneum on the right side was much thickened. The root of the mesentery was invaded with caseated glands, and there were numerous enlarged glands along its attached border. The internal organs were all healthy, and there was no lymph coating the intestines.

The occurrence of tubercular mesenteric disease and sub-diaphragmatic abscess in a child a month old is probably without precedent. The history, however, of this case appears to show that the disease was congenital, and that the child at its birth had either the abscess commencing, or, at any rate, caseous mesenteric glands. That supposition receives confirmation from the fact of there having been persistent unrest, colicky pains, unhealthy motions, and tumid belly observed from the very earliest period of its existence.

Dr. Eustace Smith (*Disease in Children*), in referring to the scrofulous diathesis, states that "a child who has the misfortune to be born with this unhappy predisposition is liable to very widespread evidences of the constitutional fault with which he is burdened. . . . These manifestations of the constitutional tendency usually take place early. . . . Infants, indeed, are in a great measure exempt from its attacks; but after the third year it begins to be common." The same author (*Wasting Diseases of Children*) further writes: "setting aside the general rarity of mesenteric disease, and its extreme rarity in children under three years of age. . . ." Dr. Angel Money (*Diseases of Children*), in describing tubercular abdominal disease, states that "the child is usually in the second period of dentition." Dr. Wood (*Practice of Medicine*), in his article on disease of the mesenteric glands, writes: "This disease is confined to no period of life, having been observed in the fœtus of six or seven months, and in old age; but it is most common in childhood. By far the largest proportion of cases occur between the ages of one and ten years."

Dr. Ashby, of Manchester, who saw the case in consultation with me, mentioned that the youngest child he had seeen with an abdominal abscess, the result of tubercular peritonitis and mesenteric disease, was four years old.

Mesenteric disease appears to be a little more common in girls than in boys. Guessent states that, in the Hôpital des Enfants at Paris, where no one is admitted under one year or over sixteen, the proportion of tubercular mesenteric cases to the whole number of deaths may be, for boys, five or six, for girls, six or eight per cent. (*Dict. de Méd.*, vi. 436).

With regard to the case here reported, none of the symptoms displayed during the first month necessarily characterized mesenteric disease; they were such as might be ascribable to flatulent distention arising from functional derangement of the stomach or bowels, or both. On this point Dr. Eustace Smith (Introduction to *Wasting Diseases of Childhood*) writes: "The large size of the belly in weakly children often attracts the attention of parents, and excites much anxiety. It is most commonly produced by accumulation of flatus, owing to the weakness of the abdominal walls." And again, "Distention of the abdomen is by no means a necessary consequence of this disease (tabes mesenterica). On the contrary, unless the glandular disease be great, the abdominal wall is more often retracted than expanded. It may become occasionally distended from flatus, as in all cases where the bowels are disordered, but the distention is, in such cases, independent of the affection of the glands, and is merely an accidental complication. . . . In all cases, therefore, when the belly is swollen uniformly, the probabilities are very strongly against mesenteric disease; and if no tumor can be detected on pressure in the situation of the glands, no foundation exists for attributing the enlargement of the abdomen to this cause."

Dr. West (*Diseases of Infancy and Childhood*) writes, "When the digestive organs perform their functions ill, nothing is more common than for the abdomen greatly to exceed its natural size."

At birth, and until a fortnight before death, the child's nutrition was not materially impaired, and it did not look ill. Dr. Eustace Smith (*Wasting Diseases of Children*), under caseation of mesenteric glands, states that "in cases where the disease is moderate in amount, and is confined entirely to the glands of the mesentery without being complicated by any chronic lesion of the bowels, nutrition may be little, if at all, affected. The child may show a fair amount of flesh; his spirits and appetite may be good; his temperature natural, and with the exception, perhaps, of a slight want of color, there may be little in his appearance to suggest a suspicion of ill health." It was only when the distention of the belly became so marked, and the superficial veins so visible, that grave suspicion arose as to the presence of mesenteric disease. On this point Dr. Eustace Smith, in the same work, remarks: "If this venous dilatation be very marked, the superficial veins being distinctly seen to ramify upon the abdominal wall, and to join the veins of the chest-wall, enlargement of the mesenteric glands should always be suspected, in the absence of chronic peritonitis or disease of the liver, but nothing more than suspicion is allowed by such evidence."

In many cases of tubercular disease of the mesentery, the symptoms are very ambiguous, and there is difficulty in detecting by palpation that which is the most reliable indication of its presence—viz., the existence of enlarged glands or nodular masses, on account of their depth.

Dr. West (*Diseases of Infancy and Childhood*) writes: "There is no *symptom* pathognomonic of tubercle of the mesenteric glands, except their being perceptible through the abdominal parietes." In this case, the difficulty of diagnosis was rendered exceptionally great from two causes: first, the very early age of the child; second, the extreme tension of the abdomen from tympanites. As to the first, peritonitis was much more likely to have existed than tubercular disease, on account of its greater frequency in early infancy. In Owen's *Surgical Diseases of Children*, the following paragraph from Ziemssen's *Cyclopædia*, vol. viii., appears: "In 186 cases of peritonitis in children, 102 occurred within the first fortnight, 63 in the third and fourth weeks, and 15 were over a month old." In this case, however, the relief afforded by friction—which was well borne—and the absence of an elevated temperature negatived the supposition of peritonitis.

Demme has described a case of tubercular disease of the intestine in an infant twenty-nine days old. As to the second, there are other diseases which might have occasioned the enlarged belly. Dr. Goodhart (*Diseases of Children*) mentions that both Hillier and Rilliet and Barthez allude to cases in which cancer of the abdominal viscera caused some difficulty in diagnosis—one in the pancreas, the others in the kidney. He also states that large tumors of the kidney are not uncommon. Dr. Eustace Smith, too (*Wasting Diseases of Children*), writes: "The liver and spleen may be themselves enlarged; and great masses of cancer occasionally spring from the kidney and from the other abdominal organs."

An examination of some of the symptoms observed, but obscure, during the life of the child, was afforded by the situation in which the abscess was found, as, for example, the persistency with which pain was evidenced when pressure was made in the right hypochondriac region, the subsidence of swelling below, and not above, the umbilicus after the escape of pus; for it is reasonable to assume that an immense abscess, such as this unquestionably was, interposed between the diaphragm and the liver, would force down the latter organ, and that when a large quantity of its contents was liberated the liver would again resume its normal position, and thus tension below the navel would be lessened.

As to the cause of the disease in this case, no evidence of constitutional disease was exhibited in either of the parents. The mother, during the whole period of gestation, was remarkably healthy and well nourished. There was, however, a not very clear history of tubercle in the family, although a cousin of the child was known to have enlargement of the cervical glands.